

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number
WO 2005/033291 A2

(51) International Patent Classification⁷: C12N
(21) International Application Number: PCT/US2004/032561
(22) International Filing Date: 4 October 2004 (04.10.2004)
(25) Filing Language: English
(26) Publication Language: English

(30) Priority Data:
60/508,763 3 October 2003 (03.10.2003) US

(71) Applicant (for all designated States except US): UNIVERSITY OF ROCHESTER [US/US]; 601 Elmwood Avenue, Box 706, Rochester, NY 14642 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MUYAN, Mesut [US/US]; 900 Genesee Park Boulevard, Rochester, NY 14619 (US). HUANG, Jing [US/US]; 300 Kendrick Road, Apt. #870, Rochester, NY 14620 (US).

(74) Agents: SPRATT, Gwendolyn, D. et al.; Needle & Rosenberg, P.C., Suite 1000, 999 Peachtree Street, Atlanta, GA 30309-3915 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HORMONE RESPONSE ELEMENT BINDING TRANSREGULATORS

(57) Abstract: Disclosed are compositions and methods for ERE-binding transregulators that specifically and potently regulate ERE-containing genes. To accomplish this, we took advantage of the modular nature of ER and initially designed a monomeric ERE binding module by co-joining two DNA binding domains with the hinge domain. Integration of strong activation or repressor domains from other transcription factors into this module generated constitutively active ERE-binding activators (EBAs) and ERE-binding repressors (EBRs) respectively. These novel transregulators are the basis for the targeted regulation of ERE containing genes, the identification of estrogen responsive gene networks, and the development of alternative/complementary therapeutic approaches for estrogen target tissue cancers.

BEST AVAILABLE COPY